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Type I Progress Report

ERTS-I

Investigation of Basin Characteristics extracted from Title: ERTS Data for Improving Regression Estimates of Streamflow

ERTS-A Proposal No.: SR 342-6F

GSFC ID No. of P.I.: IN 389 ъ.

6000 Statement and explanation of any problems that are impeding the c. progress of the investigation:

There are no problems impeding the progress of the investigation The investigation is awaiting the availability of ERTS-I at this time. 8Н data.

Discussion of the accomplishments during the reporting period and those planned for the next reporting period:

The boundaries of twenty drainage basins with records of daily streamflow in the Chesapeake Bay area of Maryland and Delaware have been mapped at a scale compatible with ERTS-I data. While awaiting the availability of ERTS-I data, aircraft data will be used with several dataanalysis systems for the automatic extraction of single subjects from images. A test will be made of the ability and ease with which these systems can extract repetitively the basin characteristics forest and open water. If quality data is available from several ERTS-I passes, an effort will be made to analyze the data for change in basin characteristics be-A revised data-analysis plan will be based upon the expetween passes. rience gained in this first attempt to detect change.

Discussion of significant scientific results and their relationship to practical applications or operational problems including estimates of the cost benefits of any significant results (To be prepared in scientific abstract form of 200 words or less):

There are no significant scientific results at this time.

f. A listing of published articles, and/or papers, pre-prints, in-house reports, abstracts of talks, that were released during the reporting period:

No publications were released during the reporting period.

g. Recommendation concerning practical changes in operations, additional investigative effort, correlation of effort and/or results as related to a maximum utilization of the ERTS system:

There are no recommendations at this time.

h. A listing by date of any changes in Standing Order Forms:

There have been no changes in Standing Order Forms during the reporting period.

i. ERTS Image Descriptor forms:

Because the imagery is not yet available, no Image Descriptor forms were submitted during the reporting period.

j. Listing by date of any changed Data Request forms submitted to Goddard Space Flight Center/NDPF during the reporting period:

No Data Request forms were submitted during the reporting period.

k. Status of Data Collection Platforms (if applicable):

Plans were made with NASA Wallops Island to install a Data Collection Platform at streamflow gaging station 1-4920, Beaverdam Branch at Matthews, Maryland; however, this platform was not scheduled to be placed in operation during the reporting period.

"Made available under NASA sponsorship in the interest of early and wide dissemination of Earth Resources Survey Program information and without hability for any use made thereof."

DRAINAGE BASIN CHARACTERISTICS FROM ERTS DATA, 1 July 1972 - 31 August 1972

Este F. Hollyday U.S.G.S., W.R.D. 8809 Satyr Hill Rd. Parkville, Md. 21234

1 September 1972

Type I Progress Report for Period 1 July 1972 - 31 August 1972

Prepared for:

Goddard Space Flight Center Greenbelt, Maryland 20771

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